

WE CLAIM:

1. A system for serving web pages to a requesting software application comprising:

a web site;

5 a plurality of front-end servers, wherein a unique network address is assigned to each front-end server;

a first channel configured to support request and response communication between the software application and the web site;

10 a plurality of second channels configured to support communication between each of the front-end servers and the web site; and

15 a redirector server operable to select one front-end server from the plurality of front-end servers and generate a response referring the requesting software application to the selected front-end server.

2. The system of claim 1 wherein the web site is located in a first address domain and the plurality of front-end servers are located within a second address domain.

3. The system of claim 1 further comprising mechanisms within the web site for redirecting a request received from the software application on the first channel to the redirector server.

4. The system of claim 1 further comprising:

mechanisms within at least some of the front-end servers for implementing a portion of the web site, wherein the redirector servers selects amongst the 5 plurality of front-end servers based upon a relative ability of the front-end servers to implement the web site without reference to the first address domain.

5. The system of claim 1 wherein the first communication channel comprises an Internet standard communication channel and the second channel comprises an enhanced communication channel linking the at least one front-end server with the web site.

6. The system of claim 1 wherein the redirector server determines a quality factor for the plurality of second channels and selects the one front-end at least partially based upon the relative quality factors of the 5 plurality of second channels.

7. The system of claim 1 wherein the redirector server determines a quality factor for the communication channel for at least one front-end and the requesting software application and selects the one front-end at least partially based upon the relative quality factors 5 of the channels between the front-ends and the requesting software application.

8. The system of claim 1 wherein the redirector server comprises a multi-tiered set of redirector servers including:

a global redirector which is registered with the 5 public domain name system as a domain name server for the domain name of the web site;

a plurality of regional redirectors, wherein each regional redirector is registered with the global redirector as a domain name server for a particular 10 topographical region; and

a plurality of network redirectors, wherein each network redirector is associated with a subset of front-ends and is registered with each of the regional redirectors as a domain name server for the associated 15 subset of front-ends.

9. The system of claim 8 wherein the global redirector selects amongst the regional redirectors based upon an estimated user location indicated by the network address supplied by the requesting software application.

10. The system of claim 8 wherein the regional redirectors select amongst the plurality of network redirectors based upon an estimated user location indicated by the network address supplied by the
5 requesting software application.

11. The system of claim 8 wherein the network redirectors select amongst the plurality of front-ends at least partially based upon a calculated index comparing the estimated quality of service that can be provided by
5 each of the front-ends in the subset of front-ends associated with the network redirector.

12. The system of claim 8 wherein the network redirectors select amongst the plurality of front-ends at least partially based upon a comparison of content and/or services provided by the front-ends.

13. The system of claim 1 wherein the redirector server generates a response referring the requesting software application to a secure port of the selected front-end server.

14. A method for redirecting a communication between a software application and a network resource over a communication network, the method comprising:

causing a software application to generate a first domain name service (DNS) request over a first channel within the communication network, the first request specifying a domain name of the network resource;
5

10 selecting a second channel within the communication network that supports communication with the network resource;

responding to the DNS request with a network address of a front-end machine that supports the second channel; and

15 conducting subsequent communications between the software application and the network resource over the second channel.

15. The method of claim 14 further comprising causing the network resource to generate a redirect message in response to the first request, the redirect response identifying a redirector server.

16. The method of claim 15 further comprising:

causing the software application to generate a second request directed to the redirector server; and

5 causing the redirector server to generate a message in response to the second request, the message identifying a selected one of a plurality of front-end servers that are configured to implement the second channel.

17. The method of claim 14 wherein the first request is resolved by the public domain name system to identify a network address of a global redirector server that is registered with the public domain name service as 5 a domain name server for the domain name of the network resource.

18. The method of claim 14 wherein the plurality of front-end servers are located within a first address domain different from an address domain in which the network resource is located.

19. The method of claim 14 wherein the act of responding to the DNS request with a network address of a front-end machine that supports the second channel further comprises responding with a secure port address
5 of the front-end machine.

20. A method for coupling a network client to a network-coupled server comprising:

causing the network client to generate a first request for domain name resolution services;

5 responding to the first request by referring the first request to a redirector name server (rDNS);

selecting a channel from amongst a plurality of available channels within the network using the rDNS;

10 sending the network client a network address of a network-coupled server implementing the selected channel.

21. The method of claim 20 wherein the first request specifies a domain name of the requested network resource.

22. The method of claim 20 wherein the network-coupled server that implements the selected channel comprises a web server.

23. The method of claim 20 wherein the step of selecting a channel comprises determining an index comparing relative quality of service between the plurality of available channels.

24. The method of claim 23 wherein the step of determining an index includes combining component factors representing both an estimate of the topological location of the network client with respect to each of the
5 available channels and current quality of service provided by each of the available channels.

25. A system for providing network resources from an origin server to a client comprising:

a set of intermediary servers topologically dispersed throughout a network;

5 an enhanced communication channel between the set of intermediary servers and the origin server; and

a redirector receiving address resolution requests for the origin server, selecting one of the intermediary servers in response to the request, and providing a
10 network address of the selected intermediary servers to an entity generating the address resolution request.